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MAGAZINE



Veteran is getting a good start in his on-the-farm training.—Photograph courtesy Iowa Farm and Home Register.

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Editorial Comment

New conditions—new challenges

Someone has said that the most constant thing in life is change itself. Some people try to ignore changing conditions; some try to build a wall against them. If we are wise, we will constantly strive to keep in touch with new conditions and take them into account as we plan ahead. As educators, our responsibility is doubly great to keep our ears tuned to new conditions and developments and to help people anticipate and interpret them.

In vocational agriculture, developments of at least three kinds offer new challenges. These are, (1) changing economic conditions which affect the farmer, (2) new developments in the science of agriculture, and (3) improved methods of instruction.



G. P. Deyoe

Changing Economic Conditions

Are lowered price levels for agricultural products likely in the future? Many economists think so. What does this likelihood imply for our programs in vocational agriculture? How may we aid farm people to adjust to lowered purchasing power which will no doubt accompany such a period? These questions challenge us as we make plans for the months ahead.

A specialist in farm management concurs with the writer that the following are *some* of the ways by which farmers may cope with the situation that probably will confront them:

1. Reduce the debt load with present "cheap" dollars and use extreme care in incurring new debts.
2. Improve the efficiency of production by increasing the yield per acre or per animal, thereby lowering the cost per unit.
3. Devise methods for using labor as efficiently as possible.
4. Take better care of farm equipment and farm buildings, thereby maintaining their efficiency and reducing replacement costs.
5. Use methods of marketing which take advantage of seasonal trends and long-time cycles in prices. (These fluctuations will probably be more in evidence than during the past few years.)
6. Improve the quality of products raised and thus take advantage of widening price differentials between good and mediocre products.
7. Give increased attention to "live-at-home" programs for providing the family food supply, thus maintaining a high nutritional level with a minimum cash outlay.
8. Use methods of soil management which will increase productivity per acre and reduce needless losses of soil fertility that sooner or later prove costly to the farmer.

These are some of the adjustments which farmers may make to cushion the shock. They hold many implications for changed or renewed emphasis in our instructional program for in-school and out-of-school groups.

New Developments in the Science of Agriculture

One of the greatest challenges to teachers of vocational agriculture is that of helping farm people interpret and utilize recent developments in the science of agriculture. With the probable need for increased efficiency to cope with changing economic conditions, these scientific developments become increasingly significant.

It is, of course, impossible to predict the scientific developments of the immediate future in agriculture, and it would

even be difficult to list all scientific findings of recent years.

The following are suggestive of the many recent developments: (1) new types of fungicides and insecticides, (2) new methods for preventing and controlling livestock diseases and parasites, (3) improved techniques for livestock improvement which take into account performance and transmitting ability, in addition to type or outward appearances, (4) improved varieties of crops, (5) methods of work simplification as applied to farm jobs, (6) new chemicals for weed control, (7) improved methods for planning the farm business to provide a maximum income consistent with wise land use and soil conservation, (8) extension of electricity and multiplication of uses for it on the farm and in the farm home, (9) new developments in food storage and preservation, (10) new mechanical devices of many kinds, and (11) new designs in farm homes and buildings.

The use of effective teaching procedures is implied if we are to carry out the responsibilities indicated in the preceding paragraphs. While nothing startlingly new has appeared recently in the realm of teaching techniques, refinements of various kinds have been made in recent years and are continually coming to light.

Some of the techniques which should continue to challenge teachers of vocational agriculture involve ways of making education function in the daily lives of farm people. In doing this, attention should be given to (1) helping people define their needs and formulate goals for the future, (2) helping people evaluate progress toward the goals set up, (3) utilizing the best that is known about how people learn and accept new methods, and (4) determining individual differences which affect learning, and giving effective consideration in instructional activities to these differences. For these and other phases of instruction, much remains to be done if we are to reach people of various ages and economic groups in our rural communities.

In these and other ways, may we keep ourselves tuned to new conditions and accept the challenges that are implicit in them.
—George P. Deyoe, Michigan State College.

Our contributors

AN ANALYSIS of the sources of contributions which were included in the volume ending with the June, 1947, issue reveals that the territories of Hawaii and Puerto Rico and all but seven states were represented. The number of contributions varied from the minimum of one for each of seven states to 15 from Illinois.

The contents of the volume (including guest editorials) included 54 articles by teachers distributed over 26 states. Sixty-three of the articles were prepared by teacher-trainers, 34 by supervisors, two jointly by supervisors and teacher-trainers, and 12 by members of the vocational education staff in the U.S. Office of Education. Twenty-five articles are credited to sources other than the foregoing. Of the latter, 15 originated within states, two in the U. S. Department of Agriculture, and eight were credited to general sources.

The index to the previous volume, Vol. 19, is inserted with this issue. The distribution of articles by sections of the magazine includes: Editorials, 37; Professional, 36; Methods and Materials, 20; Supervision, 6; Farming Programs, 17; Young-Farmer Classes, 10; Adult-Farmer Classes, 6; Veteran Classes, 15; Farm Mechanics, 13; Studies and Investigations, 11; Future Farmers of America, 27; Book Reviews, 10; Our Leadership, 4; Teacher Timesavers, 5; and Miscellaneous, 12.

Your editors desire to use contributions from all of the states and to maintain a balance in the sections commensurate with the current significance of the sections. At present there is a shortage of copy pertaining to supervision and to farm mechanics, and for the *Teacher Timesavers* column.

Skillful classroom teaching in vocational agriculture

H. E. Bradford, Teacher Education, University of Nebraska, Lincoln

WATCH the skillful teacher and you will find that he seems to know just what to do in order to produce the results he wants. Objects on the table, an exercise involving decisions, a story with the punch line well hidden—all these devices will usually keep the attention of a class at a high level.

The vocational teaching period for high schools in many states ranges in length from 60 to 120 minutes. The strong teacher is likely to find the 60-minute period entirely too short, while the inexperienced teacher may have to struggle to make a two-hour period interesting and worthwhile. One difference between the excellent and below-average teacher lies in the use of good methods of instruction and a thorough understanding of the laws of learning. In this short article a few of the problems of classroom teaching are discussed and illustrations presented to show how some teachers get desired results.

Providing Variety

Inattention and lack of interest are two very common problems that make many teachers tear their hair and wonder what is the matter with the boys in the class. The observer will say that the answer is frequently expressed in one word, "monotony." That means monotony in the organization of teaching material, monotony in the way the teacher talks, and monotony in the teacher's mind.

The remedy for monotony lies in the teacher's mind. Let him study himself to see whether he has a fixed pattern for the opening and closing of his daily discussion. It would not be unusual to find that the students in his classes can repeat his opening remarks which have a deadly sameness in wording and thought. Such a teacher must seek variety in his daily class periods and must come to the class with new approaches to the problem under consideration. Freshness of thought should characterize the teacher to the extent that students in after years will refer to him as the teacher who always had something new.

One way to overcome monotony is to make the teaching period rich and varied. Plan something to do and use it as a part of the teaching job. Sometimes the activity becomes the important feature of the whole period and forms the core for the discussion. Such a procedure gives meaning to the problem and brings forth many questions and suggestions.

John Fitzgibbon, teaching his first year at Scribner, Nebraska, has developed a unique feature that attracts at-



H. E. Bradford

tention from every visitor that enters the classroom. Over in the corner of the room on two tables is a miniature 160-acre farm with real soil. The fields are laid out in proportion and marked off with match sticks. Roads and lanes are made of white lime and the buildings are constructed from small blocks of wood. After the replica of the farm was completed, the rotation for each field was planned and a chart made to show the rotation program.

When the class had completed its work with rotations, the miniature farm was left intact and used later in their studies of terracing and contouring. Air photographs of the original farm were used in locating drainage areas and in determining what should be done to conserve the soil with the maximum efficiency.

This miniature farm in the classroom is just one of many devices that can be used effectively to make the teaching job real and interesting to a class of farm-reared youngsters who, in many cases, respond more quickly to things and action than to words.

Lewis Klein of Seward, Nebraska, says he is always on the lookout for ways to keep the teaching period going at full speed. "Objects," Mr. Klein says, "nearly always attract attention and lend themselves to enrichment in teaching." Last fall he motivated his study of wheat production by the use of a sample taken from a huge pile of wheat on the ground north of Alliance, Nebraska. The pile contained about 75,000 bushels.

Another illustration of Mr. Klein's technique is a chart on the wall on which is a large picture of a farm animal with all parts named. After a study period, the picture is replaced with an outline of the animal but with numbers instead of names of the parts. Others follow in the game which develops considerable rivalry.

Enriching the Teaching Material

Now let us turn to the question of enrichment of the teaching material. Skeleton teaching is always very practical because the students learn the "how" and the "when" of the approved practice under discussion. But rich and absorbing teaching brings in the geography, the history, and the science that are closely related to the animals, the crops, or the practices that are the topics for the day.

Elmer Phillips teaches vocational agriculture in the county high school at Bassett, Nebraska, in a sand-hill area where the farms are large ranches and cattle are the crop of first importance. Cattle grubs are annoying to the animals, so one day the class took a field trip to watch the spraying of 100 cattle with rotenone. This was real action on a large scale and very interesting to a group of ranch-reared boys.

At the next class meeting in the high

school, the boys studied not only "grub eradication" but also the life cycle of a grub, the way it spends its life, and the means of control. They found out how grubs enter the body of the animal and how they affect normal growth. Then they discovered that control sprays are most effective at certain times in the life cycle of the grub. They counted the cost of a spraying machine and did some figuring to determine whether such a machine is practical for the ordinary rancher. There was no monotony about the grub-eradication job because the students were busy trying to find out about the grub and how the spray worked.

At Nebraska City, Severin B. Sorensen has been using real specimens in the classroom when teaching the principles of animal breeding. He teaches the breeding unit in the spring when he can arrange with the local hatcheryman to put a dozen eggs in one corner of his incubator. At the end of 16 hours two or three of these eggs are broken into a glass-covered dish. The chick embryo is removed from the egg and put on a microscopic slide.

The membrane of the egg yolk is cut with sharp scissors and the end of the glass slide put thru the hole under the embryo. Viewing the embryo thru the microscope at 16, 18, 33, and 48 hours of incubation reveals the various organs as they are formed. As the boys are taking their turns to look at the embryo, the teacher gives a chalk talk on the principles of heredity and fertilization of the egg.

These illustrations show how the ingenious teacher can make his teaching jobs doubly valuable and interesting by including the science, the history, or the geography that help to furnish the "why." If we teach only what happens and when it should happen, our teaching is lean and thin. But when we begin to show the reason why, then the job becomes rich and interesting.

Making the Job Important

So far we have talked about ways to avoid monotony and ways to make the subject matter rich and interesting. Now the closing topic will deal with the problem of making the teaching job seem important to the students.

What difference does it make whether the students think the job is important? If the teacher will just recall his own high school or college days, he will have the answer in a moment. The average student will give the maximum of serious study to the courses that appeal to him as important. And he will be perfectly contented to slide thru and get by in those courses that do not seem to touch his immediate problems.

The wise teacher will include in his yearly teaching outline only those enterprises and jobs that seem important to him. In Iowa and Illinois, corn produc-

tion will receive maximum attention, whereas in semiarid regions of the great plains, corn would be dismissed with a lesson or two. This is good curriculum-making philosophy and, says one teacher, should result in the selection of teaching jobs that will be important in the eyes of both teacher and class. But that one teacher may be mistaken because often high-school students fail to see values in teaching jobs that rank high in the estimation of the teacher.

Two illustrations will serve to show how the principle of importance works. A senior trainee in agricultural education was preparing his work for a period of practice teaching in the Waverly, Nebraska, high school. One of his assignments consisted of a week's work on sorghum production. That almost floored the inexperienced senior because he knew that in the Waverly area no sorghum had been grown during the previous five years. Probably no boy in the class had ever seen a field of sorghum.

A conference with the supervising teacher at Waverly brought out the fact that, during the thirties when severe drought ruined the corn for several years in succession, sorghum was a lifesaver. Climatic history showed that periods of low rainfall would probably come again. So with rainfall charts on the board and samples of grain and forage sorghums on the table, the student teacher aroused the boys and made them ready to study a crop that was important a few years ago, and would probably be important again in that agricultural community.

Using Student Experiences

The following illustration comes from James Wall who for several years taught vocational agriculture at Crawford in the western part of Nebraska near the Wyoming line. Mr. Wall says that one good way to make a teaching job seem important is to relate it to a boy's experiences. He believes in getting boys to describe their experiences on the home farms. At Crawford he found a difficult problem. His students came from four different and distinct agricultural areas. Some came from large sheep and cattle ranches where cultivated crops were almost unknown. Others hailed from a general farming area. Another group lived on farms where potatoes were very important, almost to the exclusion of other crops. Then off to the northeast of the town was an irrigated section with its problems of intensive farming.

These diversifications of interest created a difficult classroom situation. The potato boy might go to sleep when cattle raising was the topic for the day. How could all these groups be made to feel that each major enterprise was really important?

Mr. Wall says his teaching headaches were many, but he found several methods that worked. First, the class surveyed the enterprises of the entire area to develop a mental picture of the varied phases of agriculture represented by boys in the class. Then the teacher brought

THE average high-school teacher has plenty of work without attending to all the extra details which seem to go with the profession. If the teacher of vocational agriculture is any exception, it is only in the more varied type of individual problems in shop and the detailed records kept of the "ag" students' accomplishments. Mention might also be made of annual reports and special F.F.A. statistics dealing with candidates for State and American Farmer degrees.

In departments with large enrollments the extra details often seem like the proverbial straw that broke the camel's back. During the last 20 years, the writer has had the experience of working in departments with a normal enrollment of from 50 to 70 boys and much of the time approaching the upper figure. With the exception of the present organization practically all the detail work was done by the teacher and most of it after school hours.

Here in the Atchison County Community High School the enrollment in vocational agriculture normally runs 70 or more boys. This has probably been a factor in setting up a plan for student participation in handling much of the responsibility for daily details.

When the schedules can be arranged, one or two, and sometimes three, senior "ag" boys are designated as vocational "ag" assistants. These boys, who are strong students, usually take this responsibility as an honor and put a lot of effort in their work. The assistants who work with the freshmen boys get a valuable appreciation of progress made in

out the fact that farmers often move from one locality to another where the crops and soil conditions are quite different. For that reason a knowledge of several farming situations is important.

Next, in the classroom the boys with different agricultural experiences were seated next to each other. This gave opportunity for the exchange of facts and opinions which was helpful in building up a high degree of class attention. Frequently boys were asked to prepare reports on articles related to their experiences. Such a procedure gives a boy a feeling of confidence. Project tours with talks by each boy visited stirred up interest in what other boys are doing in different agricultural areas.

In conclusion, it pays to keep one's eye fixed on the objective of the teaching period and then to use imagination and a little daring in finding the method best suited to the situation. Make each teaching job seem important and interesting to you, Mr. Teacher, and the chances are good that the bell will ring before any one becomes aware of the close of the period.

Student aid in teaching vocational agriculture

A. G. Jensen, Teacher, Effingham, Kansas

the training program. They also understand better the problems of busy "ag" teachers.

The assistants give valuable help to all Green Hands in mastering shop skills and aid the slow or timid boy in the use of tools. These boys help to check record books and notebooks. They are often more effective than the instructor in stimulating the younger lads to plan and develop large and sound farming programs. These fellows offer valuable assistance every day, and because they are acquainted with the schedule of work, they are ready to take over in case of absence of the instructor.

Commercial Students Assist

Mr. Fred Priestley, in charge of the commercial department here, is a firm believer in the idea of "learning by doing." He feels that the girls taking secretarial practice should have practical experience and that plenty of participation makes for perfection. These girls in the secretarial practice class are assigned as secretaries to teachers for the school year. Because there is always a great amount of this type work in the "ag" department, one of the most promising secretaries is assigned to this job. The secretary gives at least one hour per day to this work, and often more time with the assistance of other girls not busy, when a particular emergency develops. Already trained to take dictation, she types letters, reports, F.F.A. activity programs, instructional material for students' notebooks, report cards, and even those tests we all dislike. The material, either typed or duplicated, comes out much neater than if this teacher did it, and hours of time are saved for other pressing problems.

The efficient secretary does a nice job of filing material for future reference and renders a great service in filling out details of accomplishments in the class record books. She helps the boys get out the athletic programs sponsored by the F.F.A. and also assists in typing material for the Annual Achievement Book. The large F.F.A.-P.C.A. financing program carried on here involves considerable note drawing and bookwork, and the secretary helps handle most of these details.

Without the services of these girls in this department, the "ag" teacher would soon wear himself out and his program would suffer.

In the past, the girls who served as "ag" secretaries have always secured good secretarial positions where they have succeeded in their chosen field. Quoting Mr. Priestley, "In serving as teachers' secretaries, girls get good practical vocational training while they are aiding busy teachers."

Using the survey in teaching

J. M. May, Teacher Education, State Teachers College, River Falls, Wisconsin

"WHY do farm profits vary?" It is a matter of common knowledge that farm incomes vary considerably on farms in the same community and under comparable conditions. Out of the six to nine farmers ordinarily found on a section of land, two or three are doing quite well, two or three are breaking even, and two or three are generally unsuccessful. This difference is obviously due to a great extent to methods used in organizing the farm business and in the practices followed. For the past 40 years, farm-management specialists in our colleges of agriculture have studied this problem. The farm-management survey has been used to collect data from a large number of farms. By analyzing these data, important principles of farm organization and management have been developed which have been valuable in bringing better farming methods to adult farmers. Teachers of agriculture have found this material very useful in teaching.

Farming Programs Provide Valuable Data

Teachers of agriculture may find the survey procedure useful in their work with vocational boys. It is a recognized principle that the nearer teaching approaches the experience of the learner, the more effective the teaching becomes. Farming programs afford much valuable data which, if analyzed, will yield teaching material which will vitalize the instruction. This article is presented with this thought in mind and will attempt to illustrate the procedure, using results gathered from a class in vocational agriculture.

In Wisconsin and many other states, testing dairy herds for butterfat production is one of the major activities of agricultural departments. This program is fundamental in a plan for improving production and increasing profits. As a result of this activity, the teacher has at hand some valuable teaching material which, if thoroughly studied and analyzed, can prove most effective in teaching improved farming methods. In any group of boys with programs of herd testing, wide differences in herd production are common. The problem is to try to discover the reasons for these differences so that improvements may be made.

Using the Survey Method in the Dairy Enterprise

At Osceola, Wisconsin, Mr. Howard Askov, the teacher of agriculture, has directed an extensive dairy-testing program for several years. In this school a large percentage of the boys test their home herds the entire four years of high school. The herds tested by the group have been selected as the material for illustrating the use of the survey method. This high school is located in a good dairy community, and the farmers are

generally considered good dairymen. For the year of 1946, the average production per cow as taken from the boys' records was 316 pounds of butterfat. This is considered a very satisfactory rate of production. However, a wide variation in production existed in this group. The highest herd averaged 500 pounds per cow, and the lowest 135 pounds. In some of the herds this was the first year's test; others have been testing for a longer period.

In preparing the survey form used in this study, practices followed by successful dairymen were first studied. These practices were selected after interviewing farmers who were recognized as successful dairymen and whose herds average 350 pounds or more of butterfat. From this survey of successful dairymen, 12 practices which were judged most important by these farmers were selected. The following 12 practices formed the basis for the survey:

1. The cows are either purebred or high grade.
2. Legume hay and a balanced grain ration are fed.
3. Cows are fed grain according to their production.
4. Two to three weeks are taken to get the cow on full feed after freshening.
5. Heifers and dry cows are fed grain before freshening.
6. Supplementary pasture is available in late summer, and frequently silage is fed.
7. Minerals are fed.
8. Fifty percent or more of the cows freshen in the fall.
9. Cows are tested annually for Bang's disease, and calfood vaccination is frequently used.
10. Individual production records are kept of each cow.
11. Purebred sires are used.
12. Sires are selected from dams with a production record of 400 pounds of butterfat or more.

This is not to be taken as a complete list of practices, but these were selected because dairymen considered them the more important. A survey form was prepared and given to each boy who had completed one or more years of testing. The following is the form used and the record of one boy:

Dairy Practices Used on the Home Farm

No. of cows in the herd 18 Breed Holstein Average fat production per cow 214 Is the herd grade or purebred? Grade Kind of hay fed Clover and timothy Grain ration $\frac{1}{2}$ corn, $\frac{1}{2}$ oats How do you determine the amount of grain to feed each cow? By the amount of milk she gives. How long does it take to get the cow on full feed after freshening? 4 days Are heifers and dry cows fed grain before freshening? Yes Is supplementary pasture available in late summer? No Is silage fed in late summer? No Are minerals fed? No If so, what kind? What percentage of the cows freshen during

the fall months? 33 percent Is the herd tested annually for Bang's disease? Yes Is calfood vaccination practiced? Yes Number of years herd has been tested for production. First year. Is a purebred herd sire used? No Do you know the production of the sire's dam? No If so, what is it?

The production of this herd is considerably below the average of the group and with normal prices there would be little profit. Only five of the 12 practices were followed. Some of those not used were among the most important; namely, good feeding and practices essential for herd improvement.

Twenty herds were surveyed in this manner and the data tabulated and analyzed. As will be noted in studying the results, the value of good practices is clearly indicated.

Influence of the Sire on Production

Successful dairymen consider the selection of the herd sire a vital factor in dairy production. The herds were grouped according to the sire used as follows:

Sire Used	No. of Herds	Butterfat per Cow (Lbs.)
Grade sire	9	254
Purebred sire	5	332
Purebred sire selected from dams producing 400 lbs. butterfat	6	396

Only one-third of the herds used purebred sires selected from cows of high production. These herds averaged 20 percent more butterfat.

Influence of Feeding Legume Hay and a Balanced Grain Ration

The majority of herds were fed balanced rations. The influence of good feeding is clearly indicated by the following data:

Feeding Practice	No. of Herds	Butterfat per Cow (Lbs.)
Ration not balanced	6	238
Balanced ration	14	349

Effect of the Number of Practices Followed on Butterfat Production

Successful dairying depends not on one but several practices, and this point is brought out by the following figures:

No. of Practices Followed	No. of Herds	Butterfat per Cow (Lbs.)
Less than 5	3	219
5-9	14	315
10 or more	3	418

Too frequently students will start testing in the freshman year, but discontinue after one year. In this group, herds having two or more years of testing averaged 332 pounds of butterfat, while those with one year's test averaged 276 pounds. It is believed that if teachers would make use of the data available, students would be stimulated to take greater interest.

(Continued on page 29)

Group of Michigan teachers sponsors in-service training

Watson Fowle, Teacher, Traverse City, Michigan

OVER the past 10 years, a group of teachers of vocational agriculture in northern Michigan has held a series of meetings each year to gain knowledge and skills in the rapidly changing science of farming. The underlying purpose of these meetings has been to better equip the instructors so they might be of greater service in their home communities. During these years, the field of vocational education in agriculture has broadened to include increased emphasis on classes for adult farmers and young farmers, and more recently on classes for farmers who are veterans of World War II who wish to gain training under the G.I. Bill.



Watson Fowle

ings have been held each school year. Because of the great driving distances involved, the group got together only at these designated times. Several of the instructors had over 100 miles to drive to attend meetings. However, each year the attendance at the meetings has been very high and the original schedule of instruction carried out as planned. The continuation of these meetings, under these conditions, is testimony of the merit and value of the sound planning. A high proportion of the instruction with the teachers was carried out on the "doing level" as the group was small and all members could readily learn by a process of performing the different skills being taught. To help in developing skills, the instructor who was host to the group arranged for appropriate materials such as hogs, poultry, and fruit trees. The writer feels that this opportunity to learn skills by performing them, the close cooperation between the agricultural education staff

Book reviews

Raising Turkeys, Ducks, Geese, Game Birds, by Morley A. Jull, pp. 467, illustrated, published by McGraw-Hill, list price \$2.80. Up-to-date practical information is offered on all phases of raising and marketing turkeys, ducks, geese, guineas, pigeons, peafowl, quail, pheasants, and other upland game birds, and aquatic game birds. The conservation of wild upland and aquatic game birds is discussed. The material is organized around the specific activities involved in the field. The text is easily read; the approach to problems is practical; and the illustrations are well chosen. This book should prove of value to teachers in the field of vocational agriculture, to county agricultural agents, and to others interested in this phase of agriculture.

Principles of Feeding Farm Animals, by Sleeter Bull and W. E. Carroll, pp. 395, illustrated, published by The Interstate Printers and Publishers, list price \$2.75. The 1946 edition has been revised to include the many advances in the field of animal nutrition made during recent years, and a large number of valuable illustrations have been added. The book is designed for use as a text, for use in elementary courses in general feeding, and should also be valuable to the farmer who has not had a technical education in agriculture. The text is easily understood, the subject matter is well chosen, and should prove of value to teachers of vocational agriculture, county agricultural agents, and to institutional on-the-farm instructors.—A. P. Davidson.



A group of teachers in the Grand Traverse Region observe a demonstration of thin-wood pruning by a specialist in horticulture, following which they had the opportunity for participation in these newer methods of pruning. In a later session, methods of teaching these materials were discussed under the guidance of a teacher-trainer

This northern Michigan area, known as the Grand Traverse Region, includes seven counties with 13 departments of vocational agriculture. As this group of departments is widely spread over an area 120 miles in length, much of the planning for these in-service training meetings is done while the instructors are together at East Lansing each summer during the summer conference for teachers. Much of the success over the years can be attributed to the planning work carried on each summer for the meetings the coming fall and winter season. At the summer meeting, an analysis of the needs is made by the group, with the assistance of teacher-trainers and supervisors. A cooperative plan for the year is then developed with the aid of a teacher-trainer and subject-matter specialists.

During the past few years, five meet-

and specialists in various phases of subject matter from Michigan State College, and the summer planning are the keystones to success.

This group of teachers was one of the pioneers in bringing the well-developed plan of in-service instruction to Michigan teachers of vocational agriculture. Over the years, a wide range of skills has been taught. These have not come in any pedagogical sequence. The question of whether the material was needed by the teachers in directing their instruction determined the placing of subject matter in the meetings.

At one of these conferences, the abilities to identify proper land-use capabilities and develop cropping plans which conform with good land use and balanced programs of crops and livestock were taught. The plan was followed of having

Last spring the Winfield, Kansas, chapter dipped two carloads of certified seed potatoes for a local farmers' elevator. The pooling of the seed order and the seed treatment is an annual affair. The service by the F.F.A. chapter is a medium for helping finance the activities of the chapter.

The Holston, Tennessee, chapter organized a thrift bank last fall, and the members now have several hundred dollars on deposit.

The bank has a board of directors and an assistant cashier in each class. Almost 100 percent of the members have deposits which can be withdrawn only to make investments in farming.

a "guinea-pig" farm where all instructors could work together in developing appropriate plans. The same plan was carried out this season in two meetings on farm-home landscaping. At a recent meeting of the group, laborsaving devices and the operation of a farm shop were studied. Looking back over the long list of subjects handled by the in-service training program, it appears to be serving a need for the teachers in this field, as it has been continued by their own initiative over the years.

Suggestions for keeping and using production records in dairying

B. R. Dugdale, Secretary, Wisconsin Dairymen's Association

THE Wisconsin Dairymen's Association has as one of its major activities, the sponsoring of Junior Dairy Herd Improvement work in the high-school departments of vocational agriculture in the state. In this program we have the whole-hearted cooperation of L. M. Sasman, supervisor of the rural division of the State Board for Vocational and Adult Education, and his staff. This work is carried out in almost all of the departments in the state. A recent survey shows that 3,288 students in all-day and young-farmer classes are testing 53,336 cows each month, with 50 percent of the departments reporting.

B. R. Dugdale



Association Provides Forms

The Wisconsin Dairymen's Association supplies record-keeping forms to departments at cost. These supplies consist of a notebook cover, dairy-production and breeding records, monthly herd summary sheets, D.H.I.A. barn cards, barn-breeding record sheets, and pedigree blanks. These forms have been worked out by committees of instructors in agriculture. Samples of these forms have appeared in the series of articles that the writer prepared for *Hoard's Dairymen* from August 25, 1946, to May 25, 1947.

To teach the boy the mechanics of testing and filling in the records is not enough. We must also teach the value of using the records to feed, weed, and breed his home herd. Going over these records with the boy and his dad affords an excellent opportunity to drive home lessons in dairy herd improvement, throwing out such questions as: What are the daughters of the herd sire producing? How many are better than their dams?

Teaching Use of Records

Many instructors are summarizing the year's testing programs and using these summaries as instructional material in the classroom. Many times these show the boy where his home herd stands and furnish a challenge to him to improve the herd next year. Examples of boys who have carried a testing program for a period of years can be used to good advantage to bring out how the home herd can be improved thru a testing program. Clifford Accola, Mondovi, Wisconsin, is an outstanding example of a young farmer who has built up his home herd thru the use of production records. In Table I is a summary of his herd-improvement work.

Table I. Summary of Improvement in One Herd

Year	No. of cows	Ave. age	Ave. fat*
1933.....	13	5 yrs.	250.7 lbs.
1934.....	14	5	255.5
1935.....	12	5	286.1
1936.....	12	6	291.5
1937.....	13	6	301.0
1938.....	14	5	235.7
1939.....	14	6	302.4
1940.....	13	5	326.7
1941.....	12	5	352.4
1942.....	13	5	387.1
1943.....	14	5	414.5
1944.....	13	4	398.9
1945.....	14	5	329.9
1946.....	14	4	416.8

*Based on M. E. (mature equivalent)

We can use the production records as a basis for: (1) increasing the herd average, (2) finding brood cows, (3) proving sires, (4) feeding efficiently, and (5) developing a breeding program.

To increase the herd average, we can teach the culling of the herd. Have the boy and his dad go over the year's pro-

Table II shows records of her daughters, granddaughters, and great-granddaughters.

Table II. Production Records for Progeny From One Brood Cow

Daughters	No. of Records	Ave. lbs. fat
Golden Glow	7	354.3
Stella	5	389.8
Shirley	2	412.2
Sadie	2	446.9
Selma	1	481.6
Granddaughter:		
Cherry	4	424.8
Great-granddaughter:		
Cleo	3	386.7

To prove sires, we can assemble the records of all of the daughters of a sire and compare them with their dams. Some years ago, Quintin Metzig, a member of the Oshkosh Junior D.H.I.A. proved three sires as follows:

1. Piebe Joe Ormsby	lbs. b. f.
12 Daughters ave.	395
7 Dams ave. (24 records)	377
Increase	
2. Semple De Kol Gewina	18
9 Daughters ave.	
(24 records)	389



A junior D.H.I.A. member, his instructor, and his dad go over the herd records. From left to right John Falter, Arthur Kurtz, instructor, West Bend, Wisconsin, and John's father

duction records with you. To do this, it is a good idea to take the records right out to the barn where you can see the animals you are talking about. Pick out the low producers, cripples, cows with unsound udders, nonbreeders, and diseased cows.

To find the brood cows, we will have to have several years' records for comparison. Look for (1) persistency on long-time production, (2) consistency of production, (3) health, (4) daughters' records, (5) sisters' records, and (6) longevity. You may have an example of a brood cow in the records of young farmers who started testing in high school, like Star, a cow that Harold Clausen had in his herd when the writer was the instructor in agriculture in Bruce, Wisconsin. Star averaged 416 lbs. butterfat for 14 years.

9 Dams ave. (39 records)	412
Decrease	
3. Newinco Pontiac Creator Fobes	23
8 Daughters ave. (10 records)	424
8 Dams ave. (48 records)	427
Decrease	

By studying the production records we can feed each cow according to her production. A dairyman I know was milking 14 cows. He fed "by guess and by gosh" so to speak. His grain fed amounted to 100 pounds per day to the 14 head. After studying his individual cows' daily production, he was advised as to the proper amounts to feed each cow. In a

Rufus Whitaker Stimson



Clifford Accola, Mondovi, Wisconsin, a young farmer, has raised his herd average from 250 to 416 pounds of butterfat in 10 years of junior D.H.I.A.

little while he was getting 40 pounds of milk more per day without increasing the total grain fed to the herd.

We can develop a breeding program by studying the records. Using the brood cows to raise the heifers, we can develop a cow family of good producers. Then, too, we can select herd sires that will fit in with that breeding program.

Using Simple Records

We should keep in mind that the simpler we can keep these records, the better. My experience has been that boys do not like complicated records. With records that are simple in nature, we can get more boys to keep them and as a result get more benefit from the use of the production records.

A Junior Dairyman's Association has been organized in Wisconsin. This association will work parallel to, and in conjunction with, the Senior Dairyman's Association.

The Beatrice, Nebraska, chapter is sponsoring a crop-improvement project. Several seed-treating demonstrations were held last spring, and a number of Minnesota seed treaters were constructed for sale or rent to farmers.

Survey in teaching

(Continued from page 26)

This discussion has been confined to dairy-herd testing to illustrate the use of surveys in teaching. In like manner, production projects such as sow and litter, poultry, and others could be used. Teachers who have not made a practice of analyzing farming programs will find it extremely interesting and a very effective method of teaching. It is essential that records kept by the boys be carefully supervised for accuracy. Otherwise the study will have little value.

DR. RUFUS W. STIMSON, Massachusetts Supervisor of Agricultural Education, emeritus, died at the Cape Cod Hospital, Hyannis, Massachusetts, on May 1, 1947, in his eightieth year. Members of the North Atlantic Regional Conference assembled in New York April 23-26 sent him a letter of greeting. The writer went to see him at the hospital two days before he passed on, but he could not receive visitors. I learned from his niece, Miss Marjorie Stimson, that he appreciated our letter.

I first met Rufus W. Stimson when he came to Cornell University about 1920 to address the agricultural education faculty and students on vocational agriculture in Massachusetts. He brought with him some lantern slides, and I had the honor of manipulating these slides when he gave the signals. I saw these slides frequently during the next few years, but Mr. Stimson spoke about them with such earnestness and enthusiasm that I never tired of them. After the first showing I was moved to apply for a job of teaching vocational agriculture in Massachusetts, but my application was politely but firmly rejected.

The following year I was with a group of students making a tour thru Massachusetts and other states under the guidance of Professor George A. Works. Mr. Stimson met us at Plymouth and accompanied us to several departments. He seemed to enjoy showing off his teachers and vocational students. He was thoroly familiar with the supervised farming program of every vocational student in these departments. Some provisions in the Smith-Hughes Act show traces of the Massachusetts program which was studied by several visiting vocational educators just previous to 1917.

I saw him only occasionally between 1920 and 1930. About 1935 I made a study of former vocational students established in farming. Mr. Stimson always emphasized this phase of the program, so Massachusetts was a gold mine when I visited there and studied former students. I was amazed at his knowledge of these former students. A surprising number were originally urban boys. When he visited a department he went over it with a fine-tooth comb. No details were overlooked. He was the most thoro supervisor I have ever observed in action.

Writings

At the time of his retirement as a state supervisor, several friends urged that he write a history of agricultural education. The matter was taken up with Dr. J. C. Wright, Assistant Commissioner for Vocational Education, who approved the project and gave Mr. Stimson a six-month appointment in the U. S. Office of Education. Dr. L. H. Dennis, Mr. L. S. Hawkins and I served as consultants. Doctor Wright supposed that we would limit our study to Massachusetts and a few other states, but as Mr. Stimson

worked the project expanded. His insistence and enthusiasm carried the day, and the project shaped up about the way he wanted it. After his appointment ended, the General Education Board gave us a grant, and Mr. Stimson continued his work in Boston. About this time Colby College granted him an honorary degree and he became Doctor Stimson.

Doctor Stimson secured the cooperation of 179 persons and was able to obtain a history from every state, Puerto Rico, and Hawaii. I have always considered this project as a fine example of a cooperative study. However, its success was due to the hard work of Doctor Stimson. About 5,400 pages of manuscript came in. These we had to reduce to 1,400 pages. Doctor Stimson took one or two state stories and attempted to reduce them to about one-third their original size. He discovered some omissions and gaps and set about to remedy them so that the revised state histories came back from Boston larger than ever. At this point I took over the revision or shortening, aided by Dr. George Ekstrom, now of the University of Missouri. About this time Doctor Stimson insisted that I become coauthor with him.

Doctor Stimson's contribution was his insistence on assembling of the experience of each state in agricultural education, while most of the pioneers were still reachable. The history brings together the experience of the United States in agricultural education. When foreign countries send to the Office of Education and request an account of what we have done here in agricultural education, we send them the history.

Biographical Sketches

At the time of his passing, Doctor Stimson had nearly completed work on a volume which includes biographical sketches of leaders in agricultural education together with samples and excerpts from their writings. I have promised Doctor Stimson that I would complete this work. Dr. H. M. Hamlin of the University of Illinois will edit the material.

Rufus Stimson was a kindly man. He took special pleasure in encouraging others in his field, especially younger men. He was above carping criticism altho he had definite ideas about what he liked or did not like. He was an enthusiast. He put his whole soul into whatever he did. No effort was too great when he could in any way forward the cause of agricultural education. He was a good team worker; he was intensely loyal to his associates and administrative superiors. He was completely devoted to his wife and during her last years bore the entire burden of caring for her. Vocational agriculture has lost a great leader but, fortunately, he was able to establish the principles for which he stood so that they will live on.—F. W. Lathrop, U. S. Office of Education.

Farming Programs

C. L. ANGERER

Improvement of farming programs thru livestock shows

W. C. Dudley, District Supervisor, Appomattox, Virginia

IT HAS been said that the will to do is more important than knowing how to do. In southside Virginia, livestock shows have done much to motivate worthwhile farming programs thru inspiring F.F.A. members to undertake enterprises which are essential to a well-balanced farming program in this area.

The Lynchburg Farm Show, which includes 14 southside Virginia counties, is typical of the type of show that is affording an opportunity for exhibiting of livestock without the features that lead to exhibiting as a "racket." The primary philosophy of this show is to accept only those animals that are the bona-fide project work of the exhibitor.

Classifications have been established

which greatly encourage by livestock shows of this type. The situation of "son's pig and father's hog" is rarely found with animals that are to be exhibited. Points of fitting and showmanship that are usually difficult to have students actually apply on their animal enterprises are easily taught when boys are to exhibit the animals, as the need for the learning is well established by the fact that the animal is to be shown.

Often overlooked in evaluating the results of exhibiting are the contacts which students make. Thru local, county, district, and state shows boys meet other boys and outstanding exhibitors from whom good foundation or replacement animals may be secured. During the



Henry Patrick, Jr., member of the Rustburg, Virginia, Chapter of the Future Farmers of America, prepares a winning entry for the Lynchburg Farm Show. J. R. Gardner (left), agricultural instructor, makes helpful suggestions while Henry's father (background) watches

for junior calves, senior calves, junior yearlings, senior yearlings, and cows, thereby encouraging a member to exhibit an animal as a calf and in the various classes as it becomes older. In this way, progression in supervised farming is materially encouraged. It is estimated that over 90 percent of the 120 animals shown in 1946 will be exhibited in the 1947 show in other classes.

The Danish system of judging is used exclusively. In this way, outstanding animals are awarded the prize to which they are entitled, and boys feel they are exhibiting against a standard rather than strictly against other exhibitors. The larger number of prizes and ribbons earned helps to encourage the boys to conduct livestock projects and exhibit the animals used.

Complete student ownership of proj-

four-year training program and as adult farmers, these acquaintances and friendships are often one of the most valuable products of the exhibiting experience.

Livestock shows were among the first activities of the Future Farmers of America to be suspended during the war. With the improvement of conditions, instructors are faced with a real challenge to use these as teaching situations which lead to improved supervised practice.

For the past 10 years a cooperative seed service has been operated by F.F.A. chapters in the Lancaster, Pennsylvania, area. During this time, 174 tons of seed have been distributed with a patron's dividend totaling nearly \$6,000.

Livestock shows and market schools stimulate farm improvements

*T. D. Johnson, Teacher,
York, South Carolina*

THE teachers of vocational agriculture and registered beef-cattle breeders of York County, South Carolina, had realized for some time that the need existed for some promotional work in beef-cattle production in this county. As a result of this need, they held a meeting in the early spring of 1944 to see what could be done to promote more interest in beef-cattle production. Invited to attend this meeting were the teachers, registered beef-cattle breeders, and civic representatives from every town in the county. One of the teachers was asked to preside. At this meeting the group decided to set up a livestock show and market school for York County. The beef-cattle producers and civic representatives requested the teachers of agriculture to assist them in an educational way in presenting the school. The group elected officers, appointed committees, and made plans to meet the first Monday afternoon of each month to carry on their work for the new organization.



T. D. Johnson

Surveyed Beef Industry

A complete survey was made of the beef-cattle industry in the county. The survey showed that the largest percent of our beef cattle was grades. Based on this information, efforts were centered around developing a fat cattle show and market school with registered beef cattle being brought in by breeders largely for show purposes. Plans were made to hold a show and sale in the spring of 1945.

Sponsoring the first show and sale were the county teachers of vocational agriculture along with their respective F.F.A. chapters. Others cooperating were the York Chamber of Commerce, Rock Hill Board of Trade, and other civic groups. These civic groups furnished money for prizes and other necessary expenses.

Purposes of the livestock show and market school were as follows: To encourage more farmers to produce beef cattle on their farms as another means of increasing the farm income; to demonstrate the right type of animals for beef production, and market consumption; to establish a market for beef animals fed out locally; to furnish a market for surplus feeds, especially hay and grains; to encourage farmers to grow more feeds and develop improved pastures; to aid in

developing a diversified system of farming and, in general, make agriculture more prosperous for York County.

One hundred three beef animals were entered in the first show and sale held April 2, 1945. These animals sold for \$6,579.91. Many of the animals were thin. They had not been properly selected. The boys and farmers had not given the beef animals enough of the proper kind of feed. The teachers of agriculture were not surprised. This is the history of fat cattle shows and sales.

The opportunity had presented itself. A base had been established to work from. The first show and sale had come and gone. At this point the teachers started driving home their educational program in the county with beef-cattle producers. The experiences gained in putting on the first show and sale were used to develop the second livestock show and market school.

Interest in the livestock show and market school grew rapidly. The teachers of home economics and members of their J.H.A. chapters were added as co-sponsors due to their interest.

The second such event was held March 27, 1946. One hundred forty-one head of beef animals were entered. These animals sold for \$14,321.06. This was a sizable increase over the year before. The quality of the animals had greatly improved.

Plans for the third show and sale were begun with much enthusiasm on the part of all cooperating groups. This event was held March 26, 1947. One hundred six beef animals were entered in the show and sale. They sold for \$15,875.41. The animals were the best that had been entered in any previous show and sale. They had been properly selected. The F.F.A. and J.H.A. members and farmers had fed the animals well. Buyers were pleased. They could now buy choice beef, fed out locally.

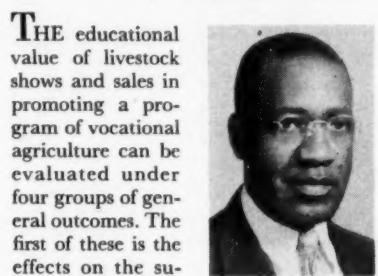
Improved Livestock Results

As a result of York County's livestock show and market school many registered beef animals are being bought and placed on farms in the county. Recently 14 registered Angus were bought at the state sale by York County farmers. Young farm boys are making plans to secure registered heifers. They plan to raise their own beef calves for future shows and sales.

It can truly be said that our livestock shows and market schools have had much to do with stimulating livestock improvements in York County.

Educational value of shows and sales

D. C. Jones, Teacher Education, Langston University, Langston, Oklahoma



D. C. Jones

THE educational value of livestock shows and sales in promoting a program of vocational agriculture can be evaluated under four groups of general outcomes. The first of these is the effects on the supervised farming program. Not only is the interest in the show likely to increase the number of livestock projects, but the size of projects and the quality of livestock is likely to be improved. Three years operation of the Oklahoma Junior Negro Livestock Show and the 12 departments who have participated in the show and sale have shown definite signs of developing as here stated. The show itself increased from 48 individuals, 70 animals, and \$2,200 in premiums and sales the first year to 131 individuals, 161 animals, and \$15,000 in premiums and sales the third year. The number of beef cattle, hog, and sheep projects increased in the 12 departments, which participated in the show. Expert opinion of the top calves and hogs of the show indicated that their quality was such as to make for fair competition in any livestock show.

Encourages Livestock Farming

The second outcome is the awakening of a consciousness of the importance of livestock in a farming program. The point may be made that not only should boys see the importance of livestock in a farming program, but Negro farmers and our Negro public must understand and appreciate the importance of livestock as a dependable and profitable source of income. To accomplish this, a board of directors was organized and Negroes were asked to donate the premium money. A little more than \$1,000 was raised the first year and nearly \$2,000

each of the last two years. The result is that our Negro state chamber of commerce has agreed to underwrite the premium money.

Dads and mothers have begun to take a keen interest. They come with the boys to the show. They help to feed and care for the animal. More feed is fed and better feeding practices get across, as a result of the efforts to compete favorably in the show, than ever before. Support of the livestock industry thru the Oklahoma City Stockyards Company on this point has been most generous. They have provided a medium for the sale of all animals at premium prices. The press and radio made liberal contributions in their publicity to develop an appreciation for and consciousness of our approach to a statewide problem of a much-needed reform in farm business organization, and to help in the conversion of our much-eroded lands to grass and livestock farming.

The third outcome is the development of abilities to feed, finish, and market livestock. The boy who feeds a steer properly for 10 to 12 months, a barrow for 6 to 8 months, and lambs for about the same period as the hog, and then puts the animal in competition with other boys who have done the same thing, soon acquires a conception of what it takes to finish an animal for market. He learns the difference in feeds and the difference in the ability of animals to convert feeds into finished products. He also learns what a finished animal is like, how to select an animal that will finish, and what a feeder must do to produce a finished animal.

The fourth outcome is the development of showmanship ability. Months of grooming and training is required to teach the animal to pose and show well. This process often develops an understanding between boy and animal which makes it difficult for the boy to part with the animal at the time of the sale. Many shed tears and others prefer to leave and

(Continued on page 38)



N.F.A. boys exhibit their livestock

A suggested plan for operating a purebred swine chain

J. J. Arceneaux, Assistant State Supervisor, Baton Rouge, Louisiana

Name of Project: This project will operate under the name of the F.F.A. Purebred Swine Circle.

Purpose of the Project: The purpose of the project is to stimulate more interest in the raising of better bred hogs on the home farms of members of the F.F.A. chapter.

Plan for Operating the Project: The F.F.A. chapter will finance the cost of two purebred gilts of the breed and allot them to two members of the chapter. As payment for these gilts each member will return in due course to the F.F.A. chapter two gilts from the first litter of the animal allotted him. The gilts returned to the chapter under this agreement will be reallocated to other members of the chapter under the same condition.

A. The member receiving a gilt from the chapter will have to agree to the following:

Responsibility of Member

- 1—Pay the registration cost of the animal.
- 2—Worm animal (roundworm) and vaccinate (Cholera, simultaneous, and Mixed Bacterin) as soon as same is moved to his farm.
- 3—Breed the gilt at age of 9 to 10 months to a registered boar of the same breed. Member will have to pay breeding fee.
- 4—Furnish the chapter adviser with breeding certificate signed by owner of the boar which serviced the gilt and also a copy of the pedigree of the boar.
- 5—Notify chapter adviser in the event the gilt should die before farrowing first litter.
- 6—Member to take care of the animal to



J. J. Arceneaux

the best of his ability with the facilities that he has.

- 7—Return to the F.F.A. chapter two gilts from the first litter of the animal. Gilts to be returned to the chapter will be selected by the chapter adviser when same are between 8 and 10 weeks old. Cash if offered by the member in lieu of the two gilts may be accepted by the chapter at the discretion of the chapter adviser.
- 8—Member to remain obligated to the F.F.A. chapter as long as requirement set forth in 7 above is not met.
- 9—It is understood that as soon as requirement in 7 above is met member will have full ownership of the animal allocated to him.

Responsibility of Adviser

B. The chapter adviser will be responsible for selecting the members to which gilts will be allocated. He should guide himself by the following:

- 1—Member receiving a gilt must be an active member of the F.F.A. chapter at the time the gilt is turned over to him.
- 2—Member will have to satisfy chapter adviser that he has the facilities and ability to take care of the gilt in such a manner as to assure the normal development of same.
- 3—The classroom work and past supervised farm practice records of member who is to receive a gilt will have to indicate that he can be depended upon and trusted to return two gilts to the chapter.
- 4—Every member of the present chapter membership will be given preference and precedence over new members insofar as he meets requirements set forth in A above.
- 5—Members of the senior class to precede all others in receiving gilts insofar as they meet requirements in A above.
- 6—Father of the member who is to receive a gilt will be in full accord with the project and will be willing to sign the above agreements together with his son.

Responsibility of Chapter

C. To encourage the progressive development of the project the F.F.A. chapter agrees to:

- 1—Help the member obtain junior membership in the registry association with which he will deal.
- 2—Assist member with the registration, vaccination, and worming of the animal allotted to him.
- 3—Aid in selecting a breeding boar and help member obtain reduced service rates.
- 4—Help provide transportation facilities for moving animals from one farm to another.
- 5—Make loan to members who may need financial assistance in connection with the project. All loans to be made for a period of not more than one year at the rate of 4 percent interest.
- 6—Assist members in disposing of surplus animals.
- 7—Give proper supervision thru the chapter adviser to the project and the chapter membership to be kept informed as to the development of the project.
- 8—To facilitate the keeping of records and simplify the working of the project the chapter will mimeograph copies of the agreements (A above) to which a member must agree before he receives a gilt. Upon receiving a gilt the member together with his father will sign two copies of same, one copy will be returned to the chapter to remain in the chapter file until two gilts are returned to the chapter.

Records to be Kept: A permanent accumulative record of the project is to be kept in the files of the department of vocational agriculture. The record is to be kept by the chapter secretary with the aid of the chapter adviser. The accumulative record will be in the form of a graph showing at a glance the development of the project and giving the following information: name of animal, date farrowed, to whom allocated, from whom obtained, date bred, date and size of litter. An abbreviated copy of this graph appears on the next page.

A corn plant uses about 368 pounds of water to produce one pound of dry matter.



Adviser of the Evergreen F.F.A. chapter, Mr. R. L. Mayeux, and three members of the chapter look over a Poland China gilt turned over to one of the members



Members of the Choudrant F.F.A. chapter use O.I.C. hogs in their chapter swine circle. Pictured above is Wade Pipes with gilt allocated him

Assisting new boys in selecting farming programs during the summer

J. B. Dreher, Teacher, North, South Carolina

MOST boys in high school need some assistance and direction along the lines of vocational guidance which will direct them into courses that will prove most beneficial in later life. The writer feels that it is desirable to contact all boys during the summer and advise with them in selecting the career for which they are best adapted. There will be some boys when first contacted that will show little interest in farming. By considering their backgrounds, abilities, facilities, and opportunities for farming, we are in position to direct most of the qualified prospective farmers into our classes. It is most important to have enrolled in our classes students whose vocations will be connected with agriculture.

The best time for the instructor and the new student to become well acquainted and to establish a bond of friendship is during the summer. This also affords the instructor an opportunity of explaining in advance the entire vocational program to the student and his parents. The



J. B. Dreher

father, boy, and instructor should discuss together the purpose of the supervised farming program. Complete and definite project plans should be made. Definite locations for all of the crop enterprises should be decided as well as the amount and kind of livestock. In most cases, it will be necessary to assist the boy in selecting desirable land, seed, and livestock. It is very probable that the soil will need liming and in some cases the land should be terraced. When all of the prospective students have definite written plans, the instructor has established the foundation and is ready to start building the next year's program.

Start With Student Interest

The first consideration in selecting a boy's project is to be sure that the major enterprise is one in which the student is most interested. Other factors to be considered are the type and topography of the land, feed, pasture and buildings available, local market demands, and the potentialities of the student and the farm.

The well-planned farming program will include a major enterprise that will produce approximately 40 percent of the students' income. This is a long-time enterprise which will eventually develop into the type of farming the student will

be doing when he becomes established in farming. The program should also include a minor enterprise which will provide quick returns. There is a need for a contributory enterprise which will contribute to the success of the major and minor enterprises and thus reduce the operating cost. Improvement projects are also important for efficient production, marketing, and general improvements on the home and farm.

In planning the farming program, we should keep in mind the advisability of diversification. A diversified program provides a better balance of labor, provisions for a steady income, insurance against failure from unfavorable prices or weather conditions, and from pests.

The program should be large enough to provide a challenge and to produce an adequate financial return. The possibility for increasing the returns is assured by having more than one cash crop and by producing and marketing feed thru livestock and livestock products. Soils must be made more productive by strip cropping, crop rotation, liming, terracing, turning under green manure and cover crops, and the proper use of fertilizer and compost.

For best results the student should provide his own labor, finance his operations, and have complete responsibility for his program. The student's parents must have a keen interest in the program and cooperate with both the student and instructor.

Georgia F.F.A. members improve homes

TODAY in Georgia 1,176 F.F.A. members can point with pride to the homes that they improved last year. These homes are more attractive, and are nicer to live in than they were a year ago, as revealed in the reports from the 73 chapters that participated in the F.F.A. Home Improvement Contest. Three hundred thirty-one members and their parents can enjoy the beauty of their painted homes. Mothers of 154 F.F.A. members are now enjoying newly installed running-water systems, and many other modern conveniences installed by members as part of this contest.

The reports of the 73 participating chapters reveal further that 95 members built masonry well curbs; 44 installed hand pumps; 94 piped running water into their homes; 431 planted shrubbery in proper locations; 131 graded the grounds, plowing, fertilizing, and sodding the lawns; 299 pruned shrubbery and mowed lawns regularly during the summer; 104 built new steps of masonry; 152 built steps of wood, treating with creosote; 162 remodeled porches; 105 painted porch floors; 79 built deep-pit outdoor toilets; 59 installed bathrooms with running water; 248 built and installed new screen doors; 188 built and installed new framed screen windows; 276 repaired screen doors; and 184 repaired screen windows.

—Georgia F.F.A. Newsletter

Name of animal.....
Born.....
Allotted to.....
Date bred.....
Date of litter.....
Size of litter.....

Name of animal.....
Born.....
Allotted to.....
Date bred.....
Date of litter.....
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Farmer Classes

J. N. WEISS

R. B. DICKERSON

From farm veteran to veteran farmer

*Clarence J. Hemming, Teacher Veterans' Classes, Alexandria, Minnesota**

WITH the approval of institutional on-the-farm training by the Veterans Administration there has come a new impetus to farming as an occupation for 86 men in Douglas County, Minnesota.

The beginning farmer of the postwar period must give careful consideration to the factors of heavy capital investment, up-to-date production techniques, and the economics of agriculture. These are the most limiting factors to a young man who wants to make farming his life's work. The shift from the more or less self-sufficient farm of a generation ago to the specialized, mechanized agriculture of today makes it necessary for a successful farmer to be a student of economics embracing the fields of finance, production, management, and marketing as well as a student of methods of production.

Each of the 86 farm veterans enrolled in the program at the Alexandria high school spends a minimum of 200 hours annually in classroom instruction. Five instructors of agriculture, who are experienced and trained in agriculture, and graduates of an agricultural college, endeavor to give to these veterans the best information in regard to production methods, farm management, and related information.

Perhaps the most unique aspect that makes this type of program the "ideal" from the standpoint of securing the adoption of the recommended practices is the individual farm supervision. The veteran

does not merely go to school, for the school is brought to the veteran while he is on the job. The educational maxim "learn by doing" becomes an actuality.

Each instructor is assigned 20 veterans on whose farms he spends a minimum of 100 hours per year or two hours per week. It is here he counsels about any problems arising on the individual farm, examines, and encourages the best practices.

Course of Study

The instructor with the advice of other members of the advisory committee constructed an integrated course of study based on a four-year training program. This course of study was based on the needs and interests of the veterans and the community.

The total time allotment was as follows:¹

1. Dairy	144 hours
2. Swine	96 hours
3. Beef	40 hours
4. Poultry	80 hours
5. Sheep	32 hours
6. Forage crops	96 hours
7. Field crops	96 hours
8. Soils	32 hours
9. Farm mechanics	56 hours
10. Farm management and economics	128 hours

All of the units are carried thru the four-year period.

The interests and needs of the veteran determine the order in which the topics

*The author gratefully acknowledges the help and kindly criticisms of G. I. Swanson, R. A. Ahlfors, A. A. Paciotti, D. L. Benson, and Mrs. L. Wojcik in the preparation of this manuscript.



The Alexandria veterans have organized a testing association in which samples are taken by the owners and tested by F.F.A. members

are covered and make the subject matter integrated in its full sense.

Dairy Improvement

Since dairying is the major enterprise in the area and on the farms of the veterans, it was the first instructional unit.

Any results of teaching are judged first by the facts and principles learned, and second by the application of these facts and principles to the situation in which the learner finds himself. Hence, to judge the results, it is interesting to note what action was instituted by the veterans.

On a study of the dairy situation these veterans realized the need for improving the breeding stock if they were to secure profitable and maximum production. This seemed most easily accomplished thru the use of superior sires capable of improving production and type.

A committee of interested veterans was appointed to study the possibilities of organizing an artificial insemination organization. The investment and maintenance of a bull stud and availability of capable inseminator were major problems.



The veterans' classes at Alexandria constructed several seed treaters which they use in treating small grain



Farm records are kept with the cooperation of the Farm Management Service at the University of Minnesota



Agricultural staff, Alexandria High School. Left to right: D. L. Benson, R. A. Ahlfors, G. I. Swanson, A. A. Paciotti, and C. J. Hemming

On further study it was found that many established farmers in the area were interested in securing the advantages of such improved breeding stock. Thru the county agricultural extension agent, a county-wide meeting was called to determine the interest of the farmers and to present the problems of such a venture. An extension dairy specialist from the state college of agriculture discussed the advantages and disadvantages associated with artificial breeding.

Later by inquiry it was found that semen could be secured from a large cooperative breeding association in the state. Plans are now well advanced for a county-wide insemination group organized cooperatively to make thereby available the breeding of superior sires. This program will have its inception at the beginning of the fall breeding season in 1947.

Other discussions held in class also brought out the needs for improved dairy sanitation. At present the class has available thru the department, cattle clippers to clip the hair from the flanks and udders of their cows. Thus 84 farms owning over a thousand cows are following this practice for the first time. A major step in the production of high-quality milk has been taken. Several others are planning or have remodeled their milkhouses to meet the state recommendations.

Testing Program

The successful management of a dairy herd includes as a prerequisite the elimination of the nonprofitable cows from the herd. This can only be accomplished by means of a testing program to determine the production and returns of the individual cow. The veteran in the program tests each cow's milk monthly and weighs both the milk and feed to determine the relative profitability of the individual cow in his herd. The physical problem of testing the milk from over 1,000 cows seemed almost unsolvable until an agreement was made with the local Future Farmers of America chapter to do this for a small fee. Since each veteran has conducted the test at some time himself and has learned the technique, nothing of instructional value was lost by having this routine work done by the high-school boys.

Following the tests, the instructor on his field visits checks the feeding program with the veteran to determine the ade-

quacy of feeding and to make suggestions for its improvement.

Thus, in this one enterprise which supplies over 80 percent of the income of the farm veteran, a program of improved breeding, selection for profitable production, and improved sanitation are an outcome of the first year of instruction. Eighty-four farms (within the group of 86, four brothers are in partnership to make 84 farms), which represent 3.2 percent of the farms in the county, have thus taken three very important steps toward successful management. More than that, the newly instituted breeding program reaches out to many farms not in the program.

Farm Planning

Early in the program each veteran is asked to map his farm and to survey its topographical characteristics. Following a study of crop rotations, a rotation is selected which best fits the individual farm and the situation in which the veteran is working. For the majority of instances, this will be the first time a definite crop rotation will be followed that insures a uniform feed supply, weed control, and conservation of the soil.

After the crop rotation is determined, each veteran, making use of the budget approach, plans his livestock program to fit his cropping system, his individual interests and capabilities. From time to time the veteran will budget alternative organizations for his farm to determine the maximum profit-yielding combinations in accordance with established farm management procedures.

This program will result in a group of farmers in Douglas County capable of making adjustments to fit the economic and physical conditions of the future as well as to establish themselves as "veteran" farmers.

Each veteran is required to keep an accurate account of his farming operations. The Minnesota Farm Account Book is used to secure a standardized set of records which would make possible a comparison of records.

The State Department of Education, the Veterans Administration, and the Division of Agricultural Economics of the University of Minnesota, entered into an agreement whereby the Division of Agricultural Economics will analyze and prepare a summary of those records submitted to them by the veterans en-

rolled in the institutional on-the-farm program. All of the students in the Douglas County program will submit their records for analysis.

This project is one of the most significant of those undertaken. By means of this complete analysis, the veteran will not only have a detailed analysis of his farm business, enterprise by enterprise, but he will have an opportunity to compare his farm and its enterprises to the average results of other beginning farmers in his area and in his school. He may also compare his performance to those who were more proficient and less proficient.

The University and the public will have in addition this opportunity to study the financial progress of a group of beginning farmers.

Home Planning

The farm veteran's family is an integral part of the farm life, which determines the success of the individuals perhaps with as much or more certainty than the methods of production that are followed. Therefore, a program of instruction was instituted in cooperation with the home economics department of the high school. Ten meetings were held before the 1946 holiday season, whereby the wives of veterans and other interested persons were instructed in meal planning and preparation. The meetings were held at the same time as the farm veterans' classes.

A series of 10 meetings are now in progress giving instruction in sewing for the family.

From these meetings the farm veteran, in addition to his learning improved farm management, will have a happier and fuller home life as a result of better home management.

A Veteran's Farm Organization

Before many sessions of instruction had passed, the trainees felt the need for and the advantage of united action on the part of the group. Out of this need and interest an organization was formed, and officers were elected. The men have adopted an official name—the Minnesota Farm Veterans Association, Douglas County Unit.

A few of the projects on which the group is acting are:

1. Pooling orders of recommended varieties of seed grain and nursery stock
2. Pooling baby chick orders
3. Group health and accident insurance

Thru the pooling of purchases, they will realize a lower initial cost and improved quality.

The group plans on exhibiting at the local county fair some educational display as a furtherance of better farming in the community.

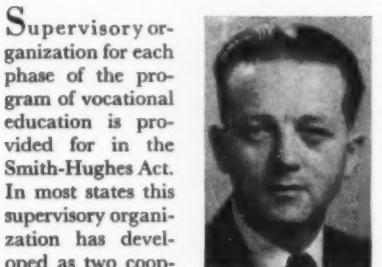
As time evolves, this organization will possibly be a strong farm organization built out of a common interest in agriculture and a common experience in service.

Supervision

LANO BARRON

Supervision of teachers in the western region

Norval J. Wardle, Instructor Farm Mechanics, Iowa State College, Ames, Iowa*



Norval J. Wardle

Supervisory organization for each phase of the program of vocational education is provided for in the Smith-Hughes Act. In most states this supervisory organization has developed as two cooperating groups, the supervisors and the itinerant teacher-trainers. National leaders recognize "no fundamental difference between itinerant teacher-trainers and supervisors." This only means the supervisor works from the state office, and the itinerant teacher-trainer ordinarily from college halls.¹ Supervisors and itinerant teacher-trainers will be treated as supervisors in this paper.

During his years as a teacher the writer received aid and inspiration from supervisors. Often, tho, the full opportunity of these contacts was not developed. Sometimes it was due to misunderstanding the supervisor's purposes. Other times the supervisor acted as tho only filling an appointment, and, therefore, the time of both was wasted. Again, the visit seemed to be an inspection to find mistakes, and the teacher tried to hide his problems and show his successes.

The knowledge that many teachers, and supervisors too, had had similar experiences and reactions caused the writer to undertake this study of supervisory devices. It is hoped that this research will aid in developing a greater understanding of supervision by both teachers and supervisors.

Study Procedures

A schedule of supervisory devices and methods was prepared from federal recommendations on teacher-training methods² and from Weiler's³ compilation of methods. This schedule was criticized by five supervisors and a like number of teacher-trainers. The revised schedule

was sent to the supervisors of states in the western region and to 12 teachers in each of eight states in that region. All the schedules were returned by the supervisors and 56 percent by the teachers.

Supervisory Devices

A great variety of supervisory devices have been developed, mostly thru trial and error method. This paper strives to point out those which not only supervisors, but teachers, believe are effective and worthwhile.

There are four kinds of devices discussed herewith:

1. Helps given teachers on the job
2. Introducing new methods to teachers on the job
3. Checks on the teacher's efficiency on the job
4. Checking supervisory efficiency

The results of the survey (Table I) demonstrates that teachers believed the methods used were good. However, there were some disagreements. Many teachers commented on the help they had received from supervisors, but one stated he could do his job without someone "checking" on him. Most supervisors (western states) maintained district supervisors were not needed in their states. Many of the teachers who liked district

supervisors were from these states. One teacher said the main fault of supervisors "is that they have to hurry on, not staying long enough to really help." Teachers in the states which used teacher-trainers for supervision liked them for this work. One teacher maintained they were the best. No doubt some supervision by teacher-trainers can contribute to vitalizing the college training program.

The helps given on school visits (Table I) were used in all states and were popular with teachers. Many teachers did not like demonstrations of new practices to the teacher. Methods of follow-up of visits were popular with supervisors but not with many of the teachers. The practice of sending teachers carbon copies of letters written by supervisors to principals and vice versa was not recommended.

The supervisors and teachers disagreed on the objectives of meetings and conferences. Many teachers maintained they received most value from meetings and conferences when a discussion of the problems suggested was the objective.

It is interesting to note that letters, both mimeographed and personal, were used by more supervisors than advised their continued use.

Methods Devices

The majority of the devices used in introducing new methods (Table II) were popular with supervisors and teachers. Demonstrations to teachers were particularly popular. Those recommending demonstrations to classes suggested caution. One teacher felt this would lower him in the students' esteem. Remembering to be discreet, this device can be used in many schools to advantage. The most popular school-visit device for introducing new practices was that of passing on new plans of other teachers, demonstrating the teachers' confidence in their fellow workers in the field.

Table I. Helps Given Teachers on the Job

Supervisory devices	State supervisors		Teachers	
	Major device	Used some	Advise using	Advise use (percentage)
Sources of help				
State supervisors	11	—	11	85.1
District supervisors	2	—	2	55.3
County supervisors	1	—	1	14.9
Teacher-trainers	4	1	5	42.6
Supervisory helps on visits				
Discuss problem with teacher	11	—	11	97.8
Discuss problem with principal or superintendent	9	2	11	87.2
Demonstrations of new practices	2	9	11	53.2
Material developed by other teachers	6	5	11	68.0
Follow-up of the visit				
Letter to principal summarizing visit	2	7	9	27.7
Letter to teacher summarizing visit	3	7	10	36.1
Copy of principal's letter to teacher	1	5	6	21.2
Copy of teacher's letter to principal	1	5	6	23.4
Discuss former visit at next visit	6	4	10	38.3
Mimeographed material sent out from state office				
Course of study recommendations	6	5	11	65.9
Laying out of program of year's work	3	6	9	65.9
Organizing programs of farming for students	3	6	9	48.9
Enterprise instructional material	5	4	9	55.3
Organizing adult and out-of-school youth	6	4	10	59.5
Lesson plans	1	6	7	44.7
Lesson analysis	1	3	4	38.3
Check list of improved practices	4	4	8	59.5
Helps given in meetings and conferences				
State conference of all agricultural teachers	11	—	11	95.7
Group agricultural meetings or conferences	7	3	10	65.9
County agricultural teachers' meetings	2	1	2	25.5
District agricultural teachers' meetings	7	2	9	70.2
Joint meetings agriculture teachers and extension	—	5	5	51.0
Objects of meetings and conferences				
Subject-matter specialist discussion	2	7	7	60.4
Other specialist discussion	1	7	8	40.4
Teacher-suggested problems	6	3	8	65.9
State and national leaders' programs	5	5	10	46.6
Development of skills	4	5	4	60.4
Mimeographed circulars for general problems	10	1	6	78.7
Personal letters for specific problems	11	—	6	63.8

*Formerly supervising teacher, Moscow, Idaho. Article summarizes a Master's thesis.

¹Teacher-Trainer Methods, Misc. Publication No. 871, U. S. Office of Education.

²Ibid

³Weiler, Warren G., A Study of Supervisory Procedures as They Are Being Conducted in Ohio and Other States in the Region. A Special Problem, 1938. Unpublished.

Why visit Future Farmers?

R. F. Nalley, Teacher, Keowee, South Carolina

Newspapers and skills schools were highly recommended, but college courses were not. One teacher said the college courses were often out of touch with day-to-day problems, that they were stereotyped and theoretical, and that the same material presented in conferences or special short courses was more effective.

One teacher emphasized that no checking on the teacher should be apparent to the students. All checking should be in the spirit of helping the teacher. Another teacher maintained that housekeeping, files, reports, and such routine should be taken care of by the office help.

Altho the devices used on visits to the farms of students are the objective checks of that which we are working to accomplish, these devices are not recommended as much by the teachers as the subjective devices used on school visits. In most teacher-training programs the subjective checks have been most emphasized. This may explain why most teachers advise their use.

One supervisor saw no benefit from a report of each visit, whereas another felt it was necessary for future reference. Discussion with the teacher and local administrative officials was the most recommended checking device according to teachers. This demonstrated their tendency to approve more informal methods of supervision.

Table II. Introducing New Methods

Supervisory devices	State supervisors			Teachers
	Major device	Used some	Advise using	Advise use (percentage)
During school visits				
Demonstrations to teachers	2	9	11	70.2
Demonstrations to classes	—	5	9	48.9
Demonstrations to individuals on farm visits	2	5	8	38.3
Pass on new plans from other teachers	6	5	10	78.7
Pass on new plans from other sources	5	3	8	74.4
Discussion with teacher	9	2	9	72.3
Newsletter of new skills, practices, etc.	5	5	10	68.0
Skill schools for groups of teachers	3	5	10	68.0
Courses at college of agriculture, regular	5	3	8	48.9
Conferences				
District	7	3	10	65.9
County	2	1	3	19.1
State	8	3	10	76.4

Table III. Checking the Teacher's Efficiency on the Job

Supervisory devices	State supervisors			Teachers
	Major device	Used some	Advise using	Advise use (percentage)
School visits				
Housekeeping in the department	7	4	6	74.4
Order in the department files	7	4	6	65.9
Reports up to the day of the visit	10	1	6	82.9
Course of study outlined	10	1	6	68.0
Program of work for the year in order	9	2	6	78.7
Out-of-school program	10	1	5	57.4
Visits to home farms of students				
Programs of representative students	5	5	6	63.8
Practices introduced	3	8	11	55.3
Teacher, parent, pupil relationship	4	6	6	51.0
Long-time programs being built	11	1	11	60.4
Boys being established in farming	10	1	11	59.5
Evaluation studies				
Departments classified and rated on study	2	5	7	46.6
Teachers classified and rated on study	—	4	6	31.9
Guide given to all teachers for self-rating	2	6	7	59.5
Reports to state office	6	1	6	38.3

Table IV. Checking Supervisory Efficiency

Supervisory devices	State supervisors			Teachers
	Major device	Used some	Advise using	Advise use (percentage)
Written description of visit by the supervisor	7	2	9	29.8
Check on reports from local teachers on supervisor	2	4	5	25.5
Discussion with teachers individually	9	1	9	63.8
Discussion at conferences of the district	3	5	7	34.0
Discussion at conferences of the county	1	2	3	17.0
Discussion at conferences of the state	5	5	9	48.9
Discussion with superintendent or principal	5	5	9	60.4

work in growing them, but in a few weeks he must have a market for them. He is growing 100 pullets for laying. It may be possible for him to sell his eggs to a hatchery, and have a larger labor income than if he sells them otherwise. These problems should be anticipated and plans for their solution made in advance.

What are some of the topics discussed during a visit to the student's farm? Bill Brown is a typical student. We first discuss what Bill is doing now, his immediate plans and the means for carrying out these plans; how many acres of different crops he will plant, where he will plant them, how much fertilizer he will use, and whether he will home-mix or buy ready-mixed fertilizer. We then talk about his future plans—his long-time farming program. Bill has problems in soil conservation, pasture development, finance, and in his livestock program. Timely visits to the boy's farm will be a valuable help to the teacher when assisting the boy to make plans for his future operations.

Study of Farm

Bill is an active F.F.A. member. I find that he offers some excellent suggestions concerning chapter activities when just the two of us are talking things over. Some of our most effective F.F.A. projects started while the boy, his dad, and I were walking over the farm.

While talking with the boy and his parents is an opportune time to discuss the student's project agreements. We must have the cooperation of the father and mother. We must visit the boy's home to get this cooperation.

Certainly Bill and I discuss fishing, hunting, and other forms of recreation. Some very useful teaching can be done on a camping, fishing, or hunting trip. I take an interest in Bill's dogs. My student takes more interest in my instruction because I do.

Visits to the boy's farm can contribute materially to building a sound supervised farming program. The boy is made to realize that he needs certain enterprises which will contribute directly to his main enterprise. Bill knows how many acres of grain and hay he will need to produce feed for his poultry and livestock. He realizes that he will need forage, temporary and permanent grazing crops in addition to his grain. And Bill is making plans to grow this feed.

The observing teacher can discover and tactfully point out a number of jobs that need to be done on the average farm. These operations may be related to the boy's shop course in farm machinery. Oiling, painting, and otherwise caring for farm machinery may save the farm many dollars in repair bills later on. At the same time, the student will have

(Continued on page 38)

Oregon chapter helps prepare city park

M. C. Buchanan, Assistant State Supervisor, Salem, Oregon

VOLUNTEERING their services in preparing the grounds of Roseburg's new city park for seeding and planting, more than 40 members of the Roseburg F.F.A. chapter have made an important contribution to the community. The boys, under Homer Grow, instructor, have used their tractor and farm equipment to grade and drag and have been engaged in clearing, piling, and burning brush.

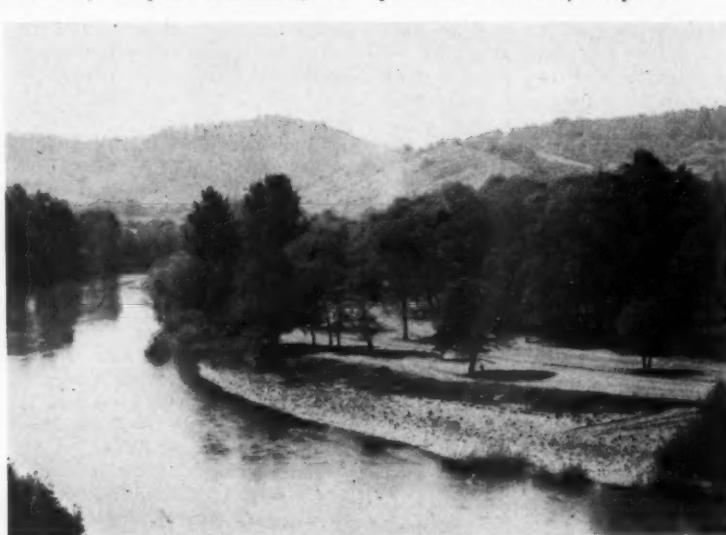
The project has been under consideration for a score or more of years, but is just now being realized. Located on the west bank of the South Umpqua River just south of Roseburg, the new park, financed by the park commission, will

soon be opened to the public.

In an editorial in the *Roseburg News Review* entitled "Let's Cooperate!" Charles V. Stanton says this about the Roseburg F.F.A. members:

"Helping with the city park program, the Future Farmers of America piled into the task with typical energy, saving the park commission several hundred dollars it would have been forced to pay for specially hired labor.

"But we believe that every boy who had a hand in cutting, piling, and burning brush, or who helped in dragging the seedbed and sowing grass, will find recompense in his personal pride in this park when it is finally completed."



A view of the Douglas County fairground property on the west bank of the South Umpqua River, where the new city park is being constructed with the assistance of the Roseburg F.F.A. chapter

Visiting Future Farmers

(Continued from page 37)

an opportunity to get the practical experience necessary to our program.

Planting the home grounds, repairing farm homes and other buildings, repairs to machinery, and numerous other jobs present an opportunity for effective teaching that the conscientious teacher cannot afford to overlook. If we take advantage of this opportunity, it will be necessary to visit the student when he is in contact with these needs.

Why visit? Is it possible to do a thorough job of teaching if we are not familiar with the student's home, his living conditions, and the farm where he should put into practice the different ideas that are brought out in classroom discussions? Is it possible to plan a practice program, to assist the boy with his long-time farming operations, or to anticipate his problems in connection with his farm work without going to his home? Will our students do the necessary supplementary farm-practice jobs, or carry out the needed improvement practices unless the

teacher is familiar with the student's needs? Visiting Future Farmers is a great deal of help and a great deal of fun to both the boy and the teacher.

Shows and sales

(Continued from page 31)

not see their hog or calf carted off to market. The love for and the pride in good livestock is a fundamental necessity in a well-balanced farm program. The climax in showmanship comes when every boy leads his animal into the show ring, and the keen eyes of the judge are focused upon it. And, finally, when he leads it into the sales ring where the auctioneer and buyers have the last say. The competition tends to develop a keen sense of selection and showmanship by teachers and boys alike. They spend hours comparing animals, determining faults which should be eliminated, watching the judges and comparing their own judgment with his, and then, get a conception of what it takes to produce good livestock.

Cover page

THE picture on the cover page was supplied by J. S. Russell, farm editor of the *Des Moines Register*. It shows Henry R. Plate, enrollee in the on-the-farm training program at Mingo, Iowa, with B. F. Krueger, farmer-trainer. Mr. Plate is one of 18 veterans enrolled for instruction under the supervision of L. L. Pickett at Mingo.

Robert E. Bertram, a candidate for the degree of bachelor of vocational agriculture at Massachusetts State College, is one of two students among 10 winners of the *Boston Globe's* \$1,000 World War II Memorial Fellowships.

Mr. Bertram plans to accept the fellowship for a year of study and travel in the Western Hemisphere. Robert will go to the University of Hawaii to study plant life in the Hawaiian Islands and possibly other Pacific areas. He will then return to Massachusetts State College to complete his work for a degree.

Kansas governor granted honorary degree

A HIGHLIGHT of the nineteenth annual convention of the Kansas F.F.A. was the awarding of the State Farmer Degree to Governor Frank Carlson.

Over 1,000 Future Farmers and their advisers attended the convention and participated in the judging and farm mechanics contests held at Kansas State College, Manhattan.



Richard Chase, president of the Kansas Association of F.F.A., awarding the State Farmer degree to Governor Carlson. The Governor is the first bona fide farmer to hold the position as chief executive and the first governor awarded the honorary State Farmer degree.

